



---

# Practice Based Research Networks

***When we try to pick out  
anything by itself, we  
find it hitched to  
everything else in the  
universe      --John Muir***

LTC Mark Chapin, Ph.D.      Assistant Professor



# Challenge of Primary Care Research

- Patients present with multiple problems
- Presenting problems imbedded in context
  - Occupation or unemployment
  - Family and social connections
  - Life events and stages
- Primary care providers use multiple interventions
  - Drugs --Education
  - Surgical procedures --Diet
  - Exercise --Counseling
  - Community services referral --Reassurance
  - Watchful waiting



# Limits of Traditional Clinical Research

---

- Most clinical research is reductionistic
  - Isolates single disease or disease processes
  - Location in tertiary medical centers creates selection bias
- Disease is studied in highly selected patients
- Designed to evaluate single interventions
- Focus on quantitative outcomes
  - Measurable physical outcomes, survival time
- Rarely looks at outcomes of primary care
  - Relief of suffering
  - Preservation or restoration of function
  - Sense of being understood and listened to



# Primary Care Research Needs

---

- Gain access to relevant health care phenomena of primary care
- Identify practice-relevant research questions
- Develop capacity for conducting research
  - Integrates practice wisdom of care providers
  - Uses rigorous multi-method research approach



# Practice Network

---

## Characteristics

- Focus on primary care research in community based populations
- Provide access to the care practiced by full time primary care clinicians
- Practice-relevant research questions
- Systemic involvement of network's clinicians



# Areas Researched by

---

## PBRN's

- Use of antibiotics in Otitis Media
- Diagnostic procedures for patients with headache
- Management of patients with miscarriages
- Carpal Tunnel Syndrome
- Non-hospitalized patients with chest pain
- RCT of brief office intervention for problem drinking



# Examples of PBRN's

---

- SURF\*NET: San Diego Unified Family Medicine Research Network. Focuses on underserved populations
- COOP: Dartmouth Primary Care Cooperative Research Network: Independent practitioners in rural New England settings
- ACORN: Virginia Ambulatory Care Outcomes Research Network: collects longitudinal data on primary care patients



# Advantages of Practice Based Research Networks

---

- Access to practice-based issues not usually approached by biomedical researchers
- Low-cost/low burden studies
- Population Power
  - ASPN covers 72 practices in 32 states and 4 provinces comprised of 343 clinicians and 350,000 patients seen in 800,000 visits per year
- Standing network has capacity for multiple studies
  - Both consecutive and concurrent studies
  - Individual practices pick which studies they want to participate in
- Short feedback loop to translate findings into practice improvement





# Limitations of Practice Based Research Networks

---

- Completeness and accuracy of reporting
- Generalizability:
  - how representative is the network's patient population to the larger US population?
  - How representative are the network's practitioners of national practitioner traits?



# A Military Family Medicine

---

## PBRN?

- Not yet!
- Structure of military medicine supports collection of data across multiple sites
- Unique demographics and military specific problem areas
- Emerging concerns of combat injuries, DNBI's, and deployment issues



# A Modest Proposal

---

- Capitol area primary care sites
- Capitol area family residency sites
- Connection with USUHS as training site and research institution
  - Access to grant funding mechanisms
  - Own IRB to streamline approvals
  - Opportunities for research by
    - Medical Students
    - FP Residents
    - Faculty